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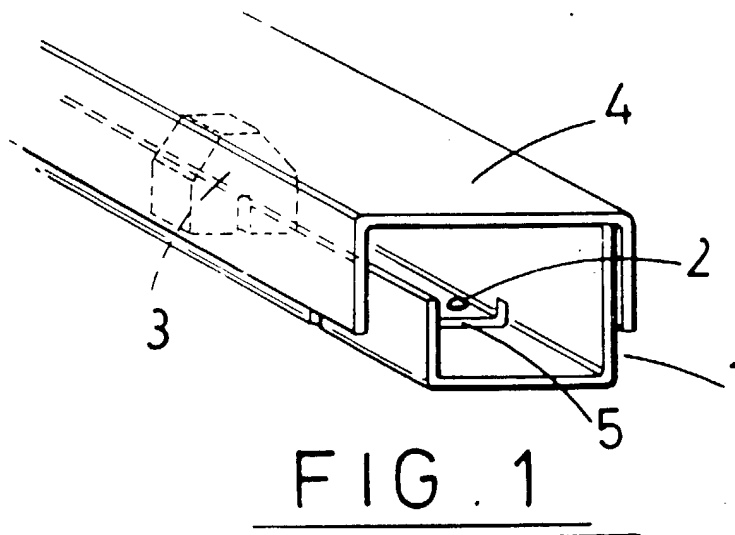
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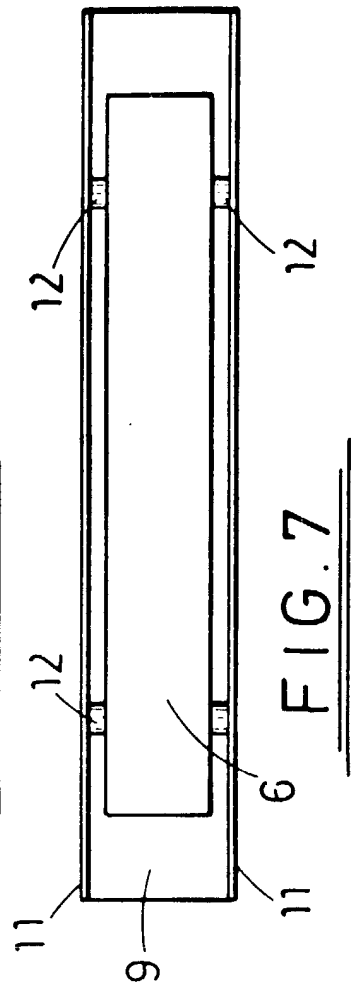
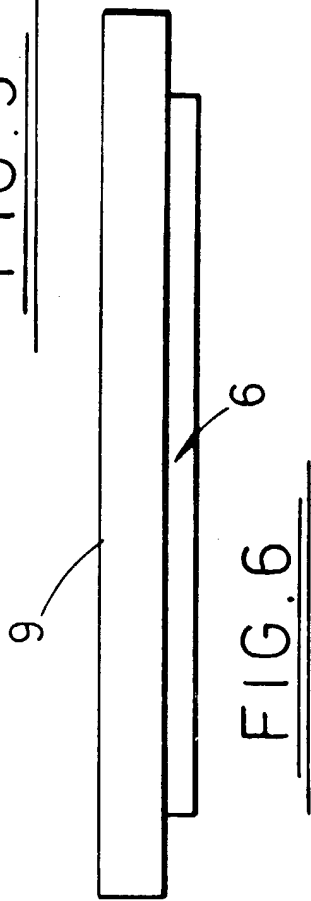
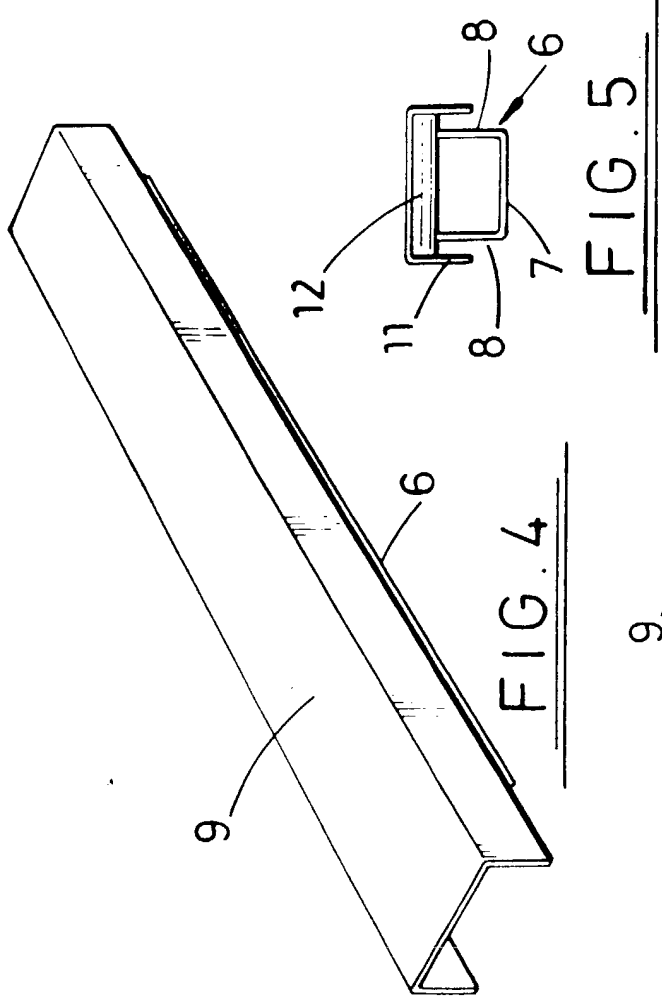
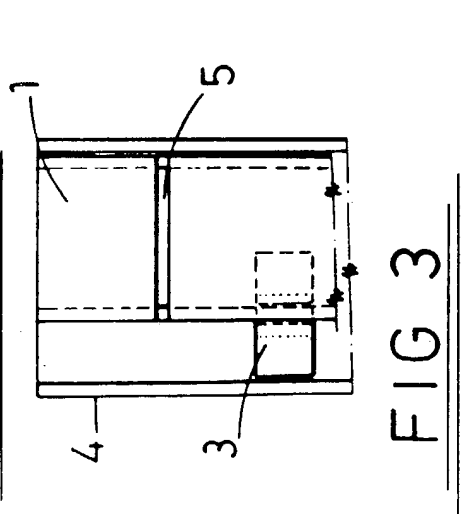
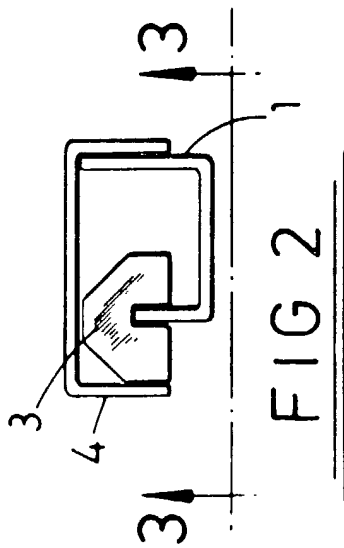
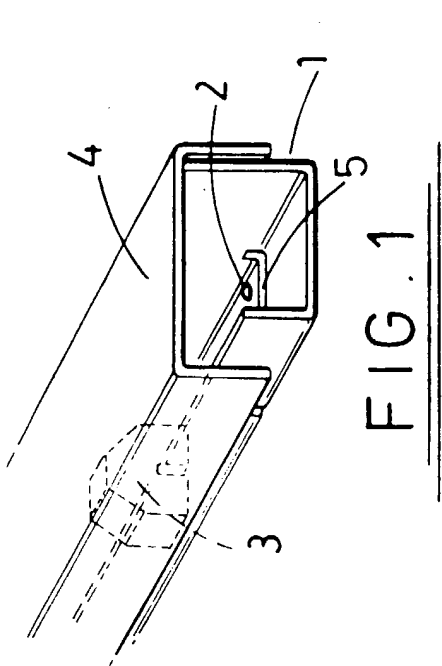
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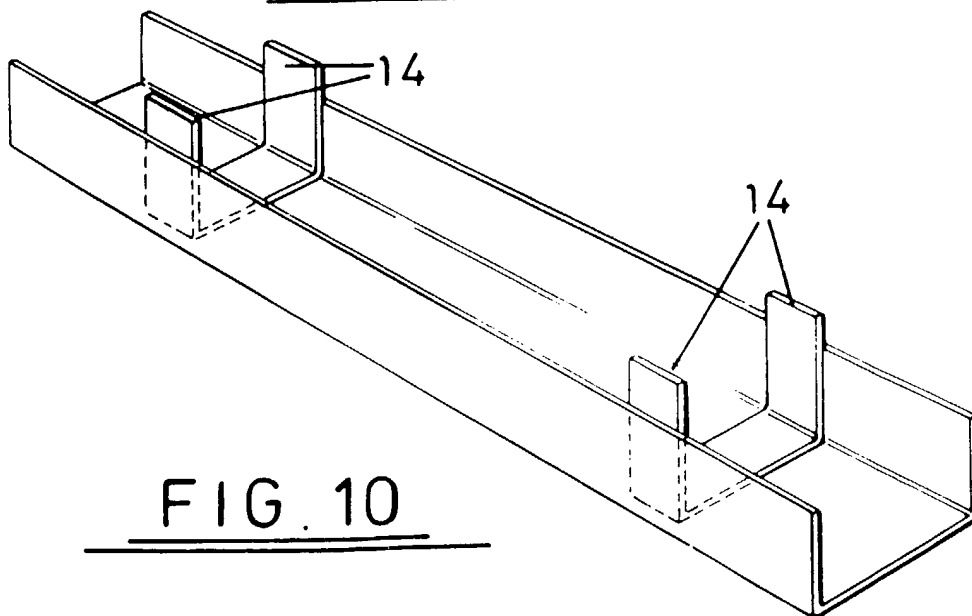
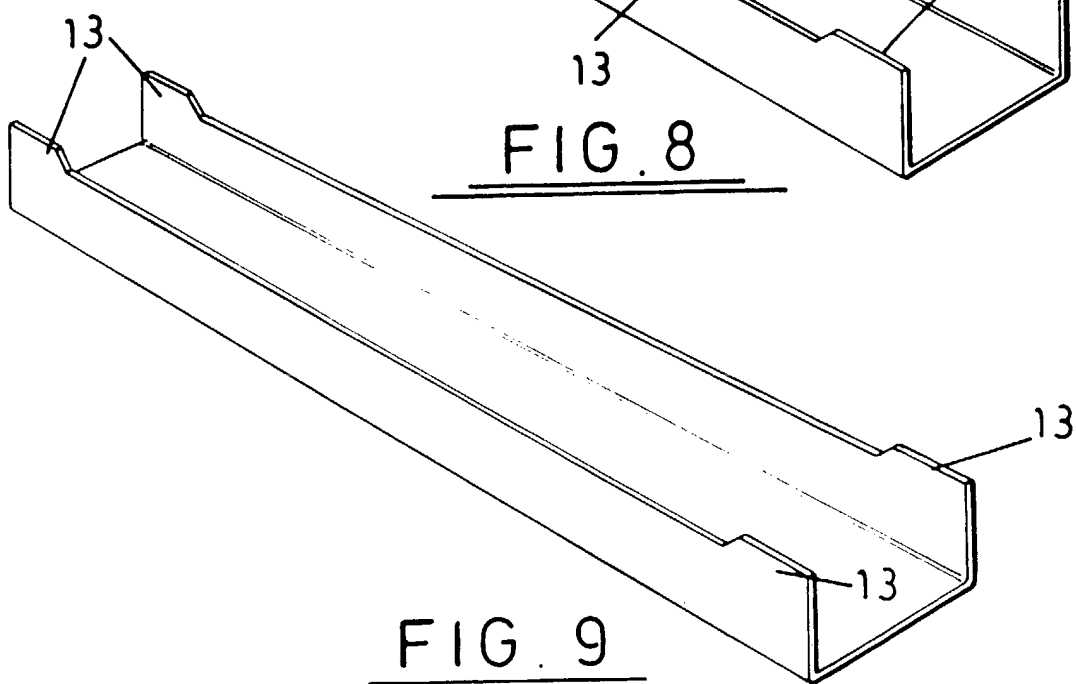
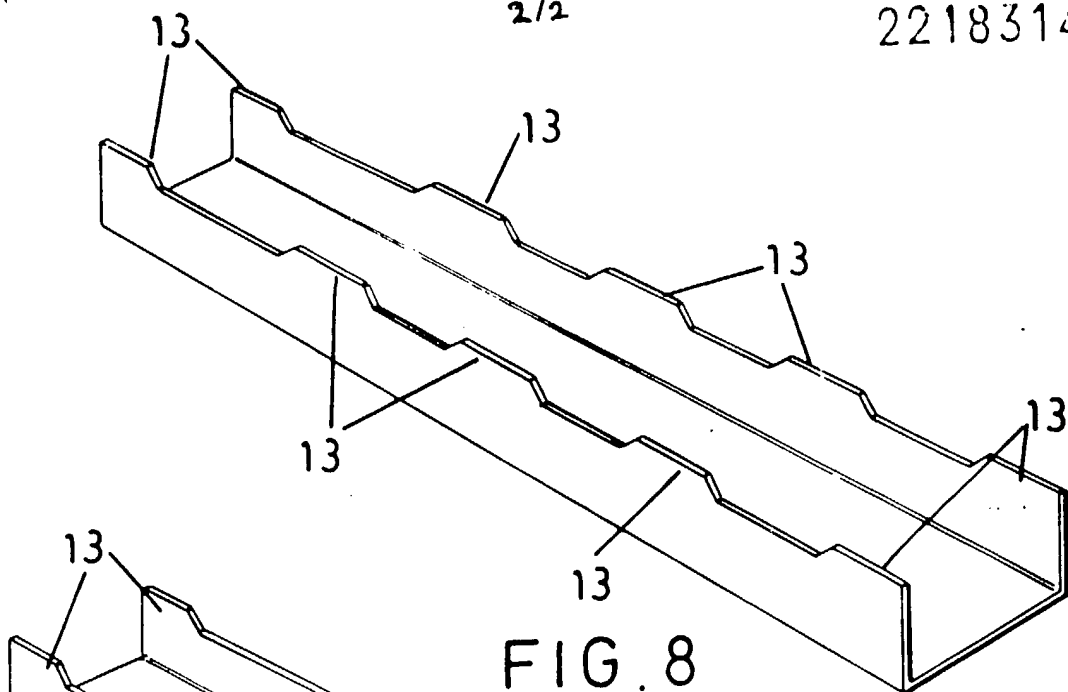
INT CL^{*} A01M(54) **Slug trap**

(57) A slug trap defining an elongate passageway to which slugs can gain access via one or more apertures extending along the length of the passageway, the passageway being arranged such that slug bait 2 can be placed therein so as to be protected by the trap from rainfall. The trap comprises an elongate lower member 1 defining a base and two upwardly extending side walls between which the passageway is defined, and an elongate upper member 4 defining a top wall and two downwardly extending side walls between which the side walls of the lower member are received. Spacing means 3 are provided to maintain a spacing between at least portions of at least one side wall of the lower member and the top wall of the upper member and between said at least one side wall of the lower member and the adjacent side wall of the upper member to define said at least one aperture.



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SLUG TRAP

The present invention relates to a slug trap.

Various attempts have been made to provide a solution to the problem represented by slugs in domestic gardens. Commercial growers can successfully eradicate slugs by the use of appropriate sprays but in domestic situations where only small plots of land are involved, a gardener has not only to kill slugs within his own boundaries, but also to deal with slugs moving onto his land from adjacent plots.

The only currently available method for dealing with such circumstances is to leave poison on the ground which attracts and kills slugs with which it comes into contact. Generally the pesticide used is metaldehyde. Pellets impregnated with this pesticide are scattered widely over the area to be protected against slugs.

The containers in which metaldehyde slug pellets are sold carry warnings to the effect that the pellets contain a poison which can kill if eaten. They should be kept away from children and pets both in storage and in use. It is not apparent how they can be kept away from children and pets when in use, given that they must be scattered widely over the soil. Furthermore, slug pellets rapidly lose their effectiveness when exposed to rain, despite attempts to make them rainproof. Thus it is necessary to spread fresh pellets at regular intervals particularly at times of frequent rainfall. It is known to shelter heaps of pellets beneath, for example, plant pots to protect them from the rain, but for this to be effective, plant pots must be distributed all over an area to be protected, which in practice is not an acceptable solution to the problem. Furthermore, the poison in the pellets still contacts the ground.

A further disadvantage associated with the normal

general usage of slug pellets is that the dead slugs are left on the soil surface. This is unsightly and the bodies may be eaten by wildlife. In particular, the very predators which normally control the size of the slug population may be killed by the slug bait so that the use of slug bait can be counterproductive.

It is known from German Patent Specification DE3335100 to provide a slug trap in the form of an elongate channel having a slot in one side and an elongate downwardly extending spike which is pushed into the ground to prevent slugs passing beneath the trap. The channel is filled with salt so that slugs entering the trap are killed. The channel can be in the form of a rigid aluminium extrusion of generally C-shaped section or can be provided with a snap-on cover defining the upper edge of the slot, or a pivotally supported cover defining the upper edge of the slot. The above device does not prevent rainwater splashing into the trap and therefore is not suitable for use with slug bait which is not rainproof. Bait which is capable of attracting slugs from the surrounding area is not rainproof. Furthermore, it is difficult to see the interior of the channel if it is not provided with a removable cover, and it is difficult to replace or close the cover of channels which can be opened. The described devices with openable covers are also relatively expensive to produce assemblies. Finally, slugs which have been killed by the salt will tend to fall out of the trap. This is not a problem if salt is the bait, but would be if a highly poisonous bait were to be used.

Swiss Patent Specification No. CH 632898 describes a slug trap in which bait is supported in a cover channel in effect suspended beneath an overhanging arm. This provides good protection for the bait, but means that it is impossible to see the bait. The user cannot determine when the trap needs cleaning

out, or the bait needs replacing. Cleaning is also difficult, particularly as removing dead and dying slugs from a slime-coated trap is not a very pleasant task.

German Patent Specification No. DE 3602188 describes a slug trap in the form of a spike supporting an annular dish and an umbrella-like cover. This device provides reasonable protection against rain, although splashing can sometimes ruin the bait, but the bait and dead slugs are easily accessible to wildlife.

It is an object of the present invention to provide a slug trap which can obviate or mitigate the problems outlined above.

According to the present invention, there is provided a slug trap defining an elongate passageway to which slugs can gain access via one or more apertures extending along the length of the passageway, the passageway being arranged such that slug bait can be placed therein so as to be protected by the trap from rainfall, wherein the trap comprises an elongate lower member defining a base and two upwardly extending side walls between which the passageway is defined, and an elongate upper member defining a top wall and two downwardly extending side walls between which the side walls of the lower member are received, spacing means being provided to maintain a spacing between at least portions of at least one side wall of the lower member and the top wall of the upper member and between said at least one side wall of the lower member and the adjacent side wall of the upper member to define said at least one aperture.

Preferably, the upper and lower members are U-shaped sections. The upper member may have side walls of equal height, or the lower member may have side walls of different heights, the spacing means being supported by the side wall of lower height.

The spacing means may be clips mounted on the said at least one side wall of the lower member. Alternatively, the spacing means are in the form of members extending between the side walls of the upper member beneath the top wall. As a further alternative, the spacing means may be extended portions of the side walls of the lower member. The extended portions may be integral with the side walls of the lower member, or members secured to the lower member.

Preferably the lower member is shorter than the upper member. Alternatively the base of the lower member may be apertured adjacent its ends to prevent water flowing there along.

Embodiments of the present invention will now be described, by way of example, with reference to the accompanying drawings, in which:

Figs. 1, 2 and 3 are respectively a perspective view of one end of a first embodiment of the invention, an end elevation of the first embodiment, and a view on the line 3-3 of Fig. 2;

Figs. 4, 5, 6 and 7 are respectively perspective, end, side and underside views of a second embodiment of the present invention, and

Figs. 8, 9, and 10 are perspective views of three alternative lower members to that of the embodiment of Figs. 4 to 7.

Referring now to Figs. 1 to 3, the illustrated embodiment comprises a first channel 1 which in use is laid on the soil and has slug pellets 2 sprinkled along its length. One side wall of the channel 1 is shorter than the other and a series of spacers 3 is arranged over the end of this side wall. A second channel 4 which is of inverted U-shape is then placed over the first channel 1 so that a passageway is defined between the two channels within which the pellets 2 are located. The top of each spacer is tapered to make it easier to correctly locate the

upper channel 4 on the lower channel 1.

A slot 5 is cut in the lower channel adjacent each of its ends so that any water which splashes into the ends of channel 1 cannot flow along the length of the slug trap. Thus the pellets 2 remain dry in normal circumstances. In the event of torrential rain some water can splash up beneath the edge of the channel 4 and between the spacers 3, but the amount of water which penetrates into the passageway defined by the slug trap is not sufficient to neutralise the effect of the slug bait.

The illustrated slug trap can be of any convenient length, for example, half a metre or one metre. A garden plot used, for example, for growing vegetables can be protected against incoming slugs simply by arranging slug traps of the type described around the perimeter of the plot. Slugs trying to pass over or beneath the slug trap are attracted to the pellets and move towards them either from the ends of the slug trap or through one of the elongate apertures defined on either side of each of the spacers 3. Isolated traps can also be used to kill slugs in the surrounding area.

The slug trap is preferably fabricated from extruded sections of, for example, PVC. Spacers 5 are provided along the length of the slug trap to maintain the spacing between the two channels and thereby ensure that there is access to the interior of the slug trap along substantially its entire length.

When a slug has been poisoned, it generally does not travel very far from the position at which it has been poisoned. Most dead slugs will accordingly remain within the slug trap, particularly if the slug bait is not placed close to the ends of the lower channel. Very large slugs may be sufficiently active after being poisoned to escape from the slug trap, but this does not happen very often. Small slugs are almost

invariably retained within the slug trap. The slug pellets retain their effectiveness for long periods and are also kept out of contact with the soil. At the end of the season, or when the trap becomes clogged with dead slugs, the contents of the slug trap can be simply brushed out into a container and disposed of safely.

Referring now to Figs. 4 to 7, these illustrate an embodiment comprising a lower U-shaped channel member 6 having a base 7 and side walls 8 and an upper U-shaped channel member 9 having a top wall 10 and downwardly extending side walls 11. Tubular spacers 12 are secured between the side walls 11 and rest on the top edges of side wall 8, thus maintaining a space between the top of the side walls 8 and the top wall 10. The spacers may be for example PVC tubes of the type used for fixing screws in holes drilled in walls.

The upper member 9 can slide sideways relative to the lower member 6, although it can assume the position illustrated with equal gaps between the facing pairs of side walls 8 and 11. If one gap is larger than the other however, it does not reduce the effectiveness of the trap. This loose engagement of the two channels together does however make it very easy to replace the upper member after it has been lifted to inspect the contents of the trap.

The lower member 6 is shorter than the upper member 9 so that rain splashing beneath the ends of the upper member does not reach the lower member.

Referring now to Figs. 8 and 9, these show lower members which can be used beneath an upper member such as that shown in Figs. 4 to 7 but without the need to provide spacers to maintain an opening through which slugs can enter the trap from the side. The function of the spacers 12, of Figs. 5 and 7 is performed by integral extensions 13 to the side walls, four such extensions being shown in Fig. 8 and two in Fig. 9.

Fig. 10 shows a further lower member in which U-shaped spacers 14 are provided to perform the function of the spacers 12 of Figs. 5 and 7.

It is a great advantage of slug traps of the type described that the slug bait they contain maintains its effectiveness for long periods. This means that the slug traps can be placed in position early in springtime so as to reduce the slug population before they have a chance to begin their reproductive cycle. To achieve a similar effect by scattering pellets on the soil surface would require very large quantities of pellets.

As mentioned above, slugs can on occasions escape from the trap after being poisoned. It is possible to make it more difficult for dying slugs to escape by screening the access apertures internally, for example, by positioning flaps across the apertures inside the passageway, the flaps being arranged so that they can be easily pushed aside by a large slug entering the trap but obstruct direct exit. Thin sheets of flexible plastic secured so as to extend across the access aperture are suitable for this purpose.

CLAIMS

1. A slug trap defining an elongate passageway to which slugs can gain access via one or more apertures extending along the length of the passageway, the passageway being arranged such that slug bait can be placed therein so as to be protected by the trap from rainfall, wherein the trap comprises an elongate lower member defining a base and two upwardly extending side walls between which the passageway is defined, and an elongate upper member defining a top wall and two downwardly extending side walls between which the side walls of the lower member are received, spacing means being provided to maintain a spacing between at least portions of at least one side wall of the lower member and the top wall of the upper member and between said at least one side wall of the lower member and the adjacent side wall of the upper member to define said at least one aperture.
2. A slug trap according to claim 1, wherein the upper and lower members are U-shaped sections.
3. A slug trap according to claim 2, wherein the upper member has side walls of equal height.
4. A slug trap according to claim 3, wherein the lower member has side walls of different heights, the spacing means being supported by the side wall of lower height.
5. A slug trap according to any preceding claim, wherein the spacing means are clips mounted on the said at least one side wall of the lower member.
6. A slug trap according to any one of claims 1 to 5 wherein the spacing means are members extending between the side walls of the upper member beneath the top wall.
7. A slug trap according to any one of claims 1 to 5 wherein the spacing means are extended portions of the side walls of the lower member.

8. A slug trap according to claim 7, wherein the extended portions are integral with the side walls of the lower member.

9. A slug trap according to claim 7, wherein the extended portions are members secured to the lower member.

10. A slug trap according to any preceding claim, wherein the lower member is shorter than the upper member.

11. A slug trap according to any one of claims 1 to 9, wherein the base of the lower member is apertured adjacent its ends to prevent water flowing therealong.

12. A slug trap substantially as hereinbefore described with reference to Figs. 1 to 3, Figs. 4 to 7, Fig. 8, Fig. 9 or Fig. 10 of the accompanying drawings.

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